21) Llanberis, Snowdon and Nant Gwynant

It is perhaps reasonable to suppose that the present village and tourist centre of Llanberis owes its existence, like Bethesda and Blaenau Ffestiniog, to the proximity of extensive slate quarry workings, but this is not so. Before the coming of the standard gauge Carnarvon & Llanberis railway in 1869 the only building of note here was the Royal Victoria Hotel (right), serving the needs of travellers visiting Dolbadarn Castle or taking the already well-established easy walking route up Snowdon. Early prints show the new railway terminus surrounded by open fields: the large quarrying population was well distributed amongst the surrounding villages, one of which,



Nant Peris, the "old Llanberis", has survived virtually unchanged beside its growing neighbour. Llanberis itself came into being in the period 1870-1900 and has been principally a tourist centre ever since, boosted by the construction of the Snowdon Mountain Tramroad from the village to the summit in 1896.

The former lakeside station of the railway from Caernarfon, (later L&NWR and LMS) still survives at 580601; picture right, but the route has been largely obliterated by the new bypass road that passes the old platform. The branch closed to passenger traffic as early as 1930 but remained open for goods and excursions until demolition in the mid sixties. Some of the small Dinorwic Quarry locomotives were delivered new by train to the station, and then run in steam down the road between the two lakes to the company's workshop.

Further extensive slate quarries on the south side of the valley behind the town may have been noted from the Dinorwic levels. consisted of several independent These concerns generally started late in the nineteenth century and working the hard grey and red rock for only 30 to 40 years. The largest group, the Glynrhonwy Quarries (right), was taken over by the Air Ministry in the last war and used for storage of explosives and ammunition. The extensive offices and barracks of the military regime have only recently been demolished (571607) and the workings are still being





cleared of dangerous materials and opened up to the public. A good impression of the scale of the wartime operations, and some very rewarding views of the Llanberis Lakes, can be gained by driving from west to east over the narrow and little used road from Cwm-y-Glo to Llanberis. This was the traditional Caernarfon – Llanberis - Penygwryd turnpike route; the lower main road was not built until circa 1890. There is otherwise little of interest to see in these quarries, but the upper workings may be easily explored and continue right up to the top of the mountain to overlook the Gwyrfai Valley beyond. The main quarry workshops and mill were situated at the foot of the series of inclines by the lakeside (572609); formerly served by a siding of the LMS line, the now somewhat uninteresting site was adapted for the Air Ministry occupation and subsequently for a variety of light industrial purposes. Nearby, an

insignificant rocky mound beside the road bears a plaque reminding us that here was the site of the founding of the North Wales Quarrymen's Union in 1876, as one of the earliest Trades Unions and afterwards a regular meeting point for the instigators, the 3,000 men of Dinorwic. Its name is Craig-yr-Undeb (Union Rock).

At the other end of Llanberis Village, the Snowdon Mountain Railway still loudly announces its presence throughout the summer months; the noise of its hard working steam locomotives echoing off the mountains for miles around. Opened as Britain's only rack railway in 1896, its construction aroused much hostility from conservationists resenting the intrusion onto the unspoilt mountainside. However, despite the well-publicized opening day mishap resulting in the loss of an engine over the edge of a precipice, the line became accepted as a convenient means for visitors of all ages to gain the summit. Similar hostility in recent years has fortunately prevented the construction of a road up the mountain so its future, although beset with financial and maintenance problems, should be secure.





The tramway is of 800 mm gauge, built on Swiss mountain railway principles, and runs seven engines of which three are 1895 originals and the rest built to a modified design in 1922. Operation is on the Abt rack system, with each engine pushing one carriage up to the summit via three intermediate crossing loops. The maximum gradient is 1 in 5, and a speed limit of 5 mph in both up and down directions gives a

journey time of one hour each way. The usual summer service is half-hourly and requires the use of all seven trains, which often follow each other in two's and three's separated by a few yards. Despite the inhospitable terrain the line is skillfully laid out and the only major engineering work is the Afon Hwch viaduct, not far from the base station at Llanberis. This is where the line commences to climb from the valley at 1 in 5 (579595) and forms an excellent vantage point to view the locomotives at work (picture right)......



The engine sheds and workshops of the railway are situated by the base station, whose original timber buildings were replaced only recently.

On the way up Snowdon further evidence of quarrying activity with prominent remains of levels and inclined planes will be seen, but these were workings not for slate but copper. There were once copper mines on all sides of the mountain, some possibly of Roman origin but all certainly well established long before the tourists arrived. The largest of them is nowadays the most rewarding to explore; the Britannia or Great Snowdon Mountain mine beside Llyn Llydaw on the footpath ascent from Pen-y-grwyd. The present footpath is the old miners track and if the water level is low it is possible to use the causeway across Llyn Llydaw constructed by the Cwm-Dyle and Green Lake Copper Mining Co. in 1853 from

waste mine material (a plaque records the history). On the far side are the remains of the once extensive mine buildings - crushing mill, smithy, barracks and office, with the workings themselves reaching up the mountainside beyond, past Llyn Glaslyn. The site was in operation until the 1930's, with lorries plying up the track once used by pack-horses. One of the vehicles involved in dismantling the machinery came to grief and its load, a huge iron-jaw stone crusher, remains where it fell.

Beyond the summit of the Llanberis pass, the road to Capel Curig negotiates a spectacular narrow ledge down the mountainside to join up with the Beddgelert road through Nant Gwynant, from which a good view of it may be obtained (659553). The first hydroelectric power station in Wales at Cwm Dyli is prominent in the valley bottom, as are the pipes that feed it with water from Llyn Llydaw. The Swissstyle stone and brick powerhouse was built in 1908 and still contains some of the original equipment. Also hereabouts was a very much smaller but probably more famous hydroelectric plant at (653540) fully described in Thomas Firbank's best-selling novel "I bought a Mountain". Such a domestic generating setup is still quite common amongst the mountain farmsteads of North Wales.

Proceeding now by the Nantgwynant route to Beddgelert, one is immediately struck by the unspoilt rural character of the road narrowly twisting and turning between the hedgerows and stone cottages, despite its "A-road" status. Now one of the few such stretches in North Wales which has not succumbed to the bulldozer of the "road improvers" in recent years, it retains something of the atmosphere once shared by them all.

Another popular ascent of Snowdon since Victorian times is that of the Watkin path, starting at (627513), laid out by the eccentric Sir Edward Watkin and "opened" by W. E. Gladstone in 1892. Today it provides ready access to a fascinating industrial valley once busy with both copper mining and slate quarrying.

The prominent and very steep inclined plane seen from the path (picture right) was part of the 2 ft gauge tramway system constructed to serve the slate quarries of the South Snowdon Co. at (613524). It may be easily followed around the hillside from the incline top to enter the workings after half a mile or so past the remains of a barracks building. The Watkin path proper also passes through the quarry, and formed the access for men and materials before it was extended as the tourist path to Snowdon summit.



Alongside the route the very much older derelict structure (622319) marks the site of Lliwedd Copper Works, active in the 1820's and 1830's. Situated beside the Afon Cwm-Llan, water power was used to drive the ore dressing machinery; the leat, wheel pit and crushing floor are easily identifiable.

Nearby are the offices and barracks, also in ruins. A tramway course is seen running from the back of the crushing mill, across the stream (picture right) and up the hillside opposite on an inclined plane. This may well have been noted earlier since it crosses the course of the later slate quarry tramway near the top of its incline mentioned above. The older line is of considerable interest as stone sleeper blocks remain on the incline, spaced to give a tramway gauge of about 4 ft. Little is known about this, but being apparently contemporary with the early Dinorwic Quarry railway developments and on land in the same ownership may suggest a common origin of design and materials.

Further up the hillside are the levels of the Braich-yr-Oen



copper mine, one adit having a bridge-rail tramline partly intact.

On the opposite side of the valley about a mile above the Lliwedd dressing mill, another larger works is worth visiting. The Lliwedd Bach copper mine (633528) has a collapsed 30 ft diameter waterwheel (cast at the Hawarden Ironworks, Flintshire), which formerly drove the ore-crushing machinery. Another pit for a 25 ft wheel appears to have been abandoned unfinished. The line of the lode, mined out in the form of a vertical slit in the hillside, can easily be followed.





Also to be seen are the Smithy and adit entrances with 2 ft gauge "T" section tramlines (right). A metal-bodied wagon survives and could suggest that this mine has been working comparatively recently; the unusual presence of such ironwork may, however, be merely a result of the extremely isolated nature of the site. Crushed ore was carried out on the backs of the home-going workmen (a once-common practice still recalled by the very oldest inhabitants) and then by pack pony down the mountain path.



Returning to the Beddgelert road further copper workings are to be seen on the south side at Sygun Mine (605488) where the crushing and dressing floors of the mill are arranged terrace-wise down the hillside below the workings. Since closure the buildings have been used as the location for a "Chinese" film set.

Keith A. Jaggers November 1978

Updates – February 2012

The oldest hotel in Llanberis continues to function as the Legacy **Royal Victoria**. The former L&NWR **station building** also survives, though much extended and modernised, as the "Coffee Pot" cafe and craft outlets. The bypass road runs where the railway once was and the main village car parks are opposite. The building is somewhat more recognisable from the south side, on the old station approach road.

The old "top road" **turnpike route** is still driveable, now called Ffordd Clegir, passing through the waste tips of the former **Glynrhonwy** group of quarries. These sites (upper and lower) are owned by the County Council, who are seeking lessees for commercial and leisure developments. The wartime underground bomb store buildings remain. Both areas are now securely fenced off alongside the road, with warning notices; the quarry pits are steep sided and flooded. An access roadway has been constructed into the lower area. The former Air Ministry buildings near the lakeside at Glynrhonwy siding now form an industrial estate, opposite the Gallt y Glyn Hotel. Around the back, a short length of

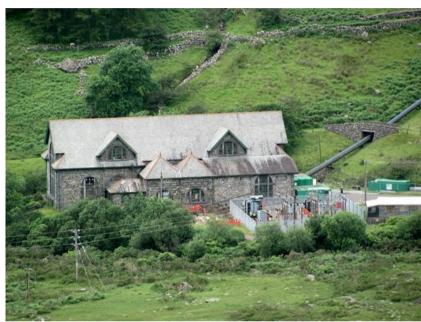
the old LNW railway line forms a footpath and cycle route, crossing a causeway over an inlet of Llyn Padarn.

The **Snowdon Mountain Railway** remains as popular as ever, with its seven steam locomotives (of which 4 are in use at any one time) now supplemented by three Hunslet diesels, allowing for a more structured maintenance and overhaul regime. There is also one new carriage (No.10). A serious fire in November 2011 destroyed the 1970s office building, unfortunately resulting in the loss of much archive material, but left the older structures unscathed.

The **Britannia Copper Mine** site is largely unchanged, with the approach causeway now usually passable on foot. Some underground surveying and recording has been carried out here – see the "Mine Explorer" website.

Cwm Dyli Power Station remains operative as Britain's oldest such, with its distinctive building and supply pipes from Llyn Llydaw; however the original equipment was superseded by a single modern turbine in 1998. It is remotely controlled from Dolgarrog.





The Nantgwynant Road to Beddgelert (A498) retains much of its previous character.

Most of the mine, quarry and tramway features mentioned along the **Watkin Path** are much the same nowadays as 40 years ago, no doubt due to their relative remoteness, and well worth exploring. There are many excellent pictures of this locality on Dave Sallery's "Penmorfa" website.

The **Sygun Copper Mine** has been open to the public for many years, usually during March – October inclusive. As well as the surface features, self-guided underground tours of part of the old workings are available.